

REMARKS

Upon entry of the foregoing amendment, Claims 1-11 and 13-22 will remain pending in the application. Claims 1 and 11 have been amended; Claims 21-22 are added. The amendments are supported by the specification at least in paragraphs [0077] and [0081]. These amendments do not introduce new matter, and their entry is respectfully requested.

Applicants would like to thank Examiner Shah and supervisory Examiner Dr. Tsai for granting a personal interview with applicants' representative. The substance of the interview has been incorporated into the amendments above and the remarks that follow.

In the Office Action of June 5, 2009, the Examiner sets forth a number of grounds for rejections. These grounds are addressed individually and in detail below.

Claim Rejections Under 35 U.S.C. § 103 (a)

Claims 1-11 and 13-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable by U.S. Patent Application Publication No. 2005/0083741 A to Chang in view of U.S. Patent Application Publication No. 2006/0279642 A1 to Yoneda for the reasons set forth on pages 3-16 of the Office Action. Applicants respectfully traverse the rejection. Applicants respectfully traverse the rejection.

To establish a *prima facie* case of obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

In this case, independent Claim 1, as amended, is directed to A method of AutoRun using a semiconductor storage device, the semiconductor storage device being coupled to a host computer having an operation system with an AutoRun mechanism, comprising:

1) the operation system of the host computer sending out an inquiry command to the semiconductor storage device for detecting a type of the device, wherein the semiconductor storage device includes at least one device; 2) the semiconductor storage device replying to the inquiry command from the operation system based on one or more predetermined device types; 3) the operation system of the host computer deeming the semiconductor storage device as one type of the predetermined device types according to the reply from the semiconductor storage device, and performing an operation accordingly; and 4) the AutoRun mechanism of the operation system searching for an AutoRun configuration file stored in the semiconductor storage device which simulates said deemed device type so that a specific file directed by the searched AutoRun configuration file can be executed by the operation system, wherein an AutoRun program is preset in the semiconductor storage device coupled to the host computer for directing the specific file; and the AutoRun program is directed by the AutoRun configuration file, wherein the searching step comprises: the operation system accessing the AutoRun configuration file stored in the semiconductor storage device to search for the AutoRun program, and starting a timing program with a predetermined timing value, **wherein the predetermined timing value is based on a size of the specific file, the time estimated for executing the AutoRun program, and performance of the semiconductor device**; executing the AutoRun program to search for the specific file, copying the AutoRun program and the specific file to be executed to a host disk of the host computer; the AutoRun program in the semiconductor storage device **calling the copy of the AutoRun program in the host disk of the host computer to**

execute the copy of the specific file in the host disk of the host computer; and the timing program sending out a reset command to the semiconductor storage device when elapsed time arrives at the predetermined timing value.

Independent Claim 11, as amended, is directed to a method of AutoRun using a semiconductor storage device, the semiconductor storage device being coupled with a host computer having an operation system with an AutoRun mechanism, comprising: 1) the operation system of the host computer sending out a first inquiry command to the semiconductor storage device for detecting the type of the device, the semiconductor storage device including at least one device; 2) the semiconductor storage device replying to the first inquiry command from the operation system that the device is an optical disk drive; 3) the operation system of the host computer deeming the semiconductor storage device as an optical disk based on the reply from the semiconductor storage device, and performing an operation accordingly; and 4) the AutoRun mechanism of the operation system searching for an AutoRun configuration file stored in the semiconductor storage device which simulates an optical disk drive so that a specific file directed by the AutoRun configuration file can be executed, the searching step comprising: (4-1) the operation system sending out a second inquiry command to detect whether an optical disk is inserted into the optical disk drive when the semiconductor storage device is deemed to be an optical disk drive; (4-2) in response to the second inquiry command, the semiconductor storage device, which simulates an optical disk drive, replying to the operation system after a predetermined delay, that an optical disk is already inserted into the optical disk drive so that the operation system can deem the semiconductor storage device as an optical disk with an optical disk; and (4-3) the AutoRun mechanism of the operation system searching for the AutoRun configuration file stored in the semiconductor storage device which simulates the optical disk

drive with an optical disk so that the operation system can execute the specific file directed by the AutoRun configuration file, wherein an AutoRun program is preset in the semiconductor storage device coupled to the host computer for directing a specific file; and the AutoRun program is directed by the AutoRun configuration file, wherein the step (4-3) comprises: the operation system accessing the AutoRun configuration file stored in the semiconductor storage device to search for the AutoRun program, and starting a timing program with a predetermined timing value, **wherein the predetermined timing value is based on a size of the specific file, a time estimated for executing the AutoRun program, and performance of the semiconductor device**; and executing the AutoRun program in the semiconductor storage device to search for the specific file, copying the AutoRun program in the semiconductor storage device and the specific file to be executed to a host disk of the host computer; the AutoRun program in the semiconductor storage device **calling the copy thereof in the host disk of the host computer to execute the copy of the specific file in the host disk of the host computer.**

In contrast, Chang generally describes an integrated circuit memory device with incorporated AutoRun functionality. As discussed with the Examiner during the interview, Chang fails to teach or suggest that the AutoRun program in the semiconductor storage device **calling the copy of the AutoRun program in the host disk of the host computer to execute the copy of the specific file in the host disk of the host computer** as recited in the present independent Claims 1 and 11. Chang only provides an autorun executable file (e.g., a file named “Autorun.inf”) to the host. The host runs the autorun executable file (i.e., “Autorun.inf”) to provide the autorun functionality. Chang, however, does not teach or suggest copying the AutoRun program **and the specific file** to the host disk of host computer, as recited in Claims 1

and 11. Further, as the Examiner admitted that Chang fails to mention a timing program with a predetermined timing value which is based on a size of the specific file.

Yoneda does not cure the deficiency of Chang. Yoneda generally describes an electronic still camera for converting captured optical images into electric image signals and is cited for its teachings on timing means. Nonetheless, Yoneda does not mention anything about the AutoRun program in the semiconductor storage device calling the copy of the AutoRun program in the host disk of the host computer to execute the copy of the specific file in the host disk of the host computer as recited in the present independent Claims 1 and 11. For this reason alone, the present Claims 1 and 11 are patentable over Chang and Yoneda, because the cited references, individually or in combination, fail to teach or suggest all the claimed limitations.

In addition, Yoneda fails to disclose “. . . the predetermined timing value is based on a size of the specific file, a time estimated for executing the AutoRun program, and performance of the semiconductor device . . .” as recited in the present independent Claims 1 and 11.

Furthermore, Chang mentions switching from the autorun functionality to a common storage by a re-enumeration process. Chang does not need the timing mechanism described in Yoneda. Therefore, there is no reason to motivate a person of ordinary skill in the art to introduce the timing mechanism of Yoneda into Chang’s system.

Lastly, neither Chang nor Yoneda suggests “the AutoRun program in the semiconductor storage device calling the copy of the AutoRun program in the host disk of the host computer to execute the **copy of the specific file in the host disk of the host computer**.” Consequently, the claimed method has unexpectedly superior features that can avoid a sudden break of the execution of the specific file or a blue-screen phenomenon, (see Paragraph 0067 of the present Specification), when the semiconductor storage device is switched (for example, from CD-ROM

to USB device) and configured while the specific file is running. One skilled in the art would not be able to practice the present claimed invention based on Chang and Yoneda. Accordingly, Applicants respectfully submit that Claims 1 and 11 are patentable over Chang and Yoneda. Further, Claims 2-10 and 13-20 are patentable over Chang in view of Yoneda because they depend from one of Claims 1 and 11 and recite additional patentable subject matter.

In view of the foregoing, Applicants respectfully submit that the grounds for this rejection have been obviated and that withdrawal of the rejections 35 U.S.C. § 103 (a) is respectfully requested.

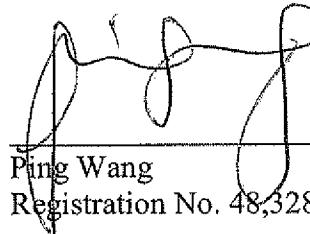
CONCLUSION

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to contact Ping Wang (Reg. No. 48,328) at 202.842.0217.

Respectfully submitted,

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